Please amend the subject application as follows:

IN THE CLAIMS:

Please accept amended claims 1, 5, 7, 13 and 14 and new claims 19-24 as follows:

1. (currently amended) A thin film transistor substrate comprising:

a pixel region and a pad region;

a plurality of electrode pads disposed on end portions of gate and data lines arranged on a substrate in the pad region;

an insulating layer formed on the substrate in the pixel region; and

a conductive bump including a protrusion member disposed on the electrode pad with a predetermined thickness and a conductive coating layer disposed on the protrusion member to be electrically connected to the electrode pad, the conductive bump being electrically connected to an electrode of a driving integrated circuit (IC) using a non-conductive resin, wherein the driving IC applies a predetermined signal to the electrode pad, [[and]] wherein a width of the protrusion member is smaller than or equal to a width of the electrode of the driving IC, and wherein the protrusion member and the insulating layer comprise substantially the same material.

2. (original) The thin film transistor substrate of claim 1, wherein the protrusion member is disposed on the electrode pad such that a peripheral portion of the electrode pad is exposed.

3. (original) The thin film transistor substrate of claim 2, wherein the protrusion

member comprises an embossing pattern on an upper surface thereof.

4. (original) The thin film transistor substrate of claim 1, wherein the protrusion member comprises a plurality of projections spaced apart by a predetermined distance, a portion of the electrode pad being exposed through a space between the projections.

5. (currently amended) A method of manufacturing a thin film transistor substrate, the method comprising:

forming a gate line, a data line and a plurality of electrode pads disposed on end portions of the gate and data lines, wherein the plurality of electrode pads are disposed in a pad region;

forming a plurality of TFTs in a pixel region;

forming an insulating layer on the plurality of TFTs; and

forming a conductive bump including a protrusion member disposed on the electrode pads to have a predetermined thickness and a conductive coating layer disposed on the protrusion member to be electrically connected to the electrode pad, the conductive bump being electrically connected to an electrode of a driving IC using a non-conductive resin applies a predetermined signal to the electrode pad, wherein a width of the protrusion member is smaller than or equal to a width of the electrode of the driving IC, wherein the protrusion member and the insulating member are simultaneously formed and comprise substantially the same material.

6. (original) The method of claim 5, wherein the conductive bump is formed by:

forming a photoresist organic layer on the electrode pad;

patterning the photoresist organic layer to form a protrusion member on the electrode pad;

forming a conductive layer covering the protrusion member; and

patterning the conductive layer to form a conductive coating layer on the protrusion member, the conductive coating layer being electrically connected to the electrode pads.

7. (currently amended) A liquid crystal display (LCD) apparatus including a pixel region having a plurality of thin film transistors (TFT) and conductive lines connected to the thin film transistors, and including a pad region having a plurality of electrode pads, the LCD apparatus comprising:

an LCD panel including a TFT substrate, a color filter substrate corresponding to the TFT substrate, and a liquid crystal layer interposed between the TFT substrate and the color filter substrate, the TFT substrate including an insulating layer formed on the plurality of TFTs, a conductive bump having a protrusion member disposed on the electrode pad, and a conductive coating layer disposed on the protrusion member that is electrically connected to the electrode pad, wherein the insulating layer and the protrusion member comprise substantially the same material;

a driving integrated circuit (IC) having an electrode that is electrically connected to the conductive bump to apply a predetermined signal to the electrode pad; and

an adhering member disposed between the conductive bump and the driving IC, the adhering member adhering the driving IC to the conductive bump to ensure an electrical connection between the conductive bump and the driving IC, wherein a width of the protrusion member is smaller than or equal to a width of the electrode of the driving IC.

8. (original) The liquid crystal display apparatus of claim 7, wherein the protrusion member comprises an elastic organic material so that the conductive bump is compressed by a distance when the driving IC is pressed down and is restored corresponding to the distance when the driving IC is released, thereby maintaining an electrical connection between the conductive bump and the driving IC.

9. (original) The liquid crystal display apparatus of claim 8, wherein the protrusion member is disposed on the electrode pad such that a peripheral portion of the electrode pad is exposed.

10. (original) The liquid crystal display apparatus of claim 9, wherein the protrusion member comprises an embossed pattern on an upper surface thereof.

11. (original) The liquid crystal display apparatus of claim 8, wherein the protrusion member comprises a plurality of projections spaced apart by a predetermined distance, a portion of the electrode pad being exposed through a space between the projections.

12. (original) The liquid crystal display apparatus of claim 7, wherein the adhering member comprises a non-conductive resin that is softened during a thermal compression process on the driving IC and has gradually hardened from the time when the thermal compression process is completed, so that the driving IC is adhered to the conductive bump by a contraction of the non-conductive resin due to a hardening thereof.

13. (currently amended) A method of manufacturing a liquid crystal display apparatus including a pixel region having a plurality of thin film transistors (TFT) and conductive lines connected to the thin film transistors, and including a pad region having a plurality of electrode pads, the method comprising:

forming a TFT substrate including a conductive bump having a protrusion member formed on the electrode pad and a conductive coating layer disposed on the protrusion member that is electrically connected to the electrode pad;

forming a color filter substrate oppositely combined with the TFT substrate;

forming a liquid crystal layer between the TFT substrate and the color filter substrate; and

connecting an electrode of a driving integrated circuit (IC) to the conductive bump electrically by using an adhering member, the driving IC applying a predetermined signal to the electrode pad, wherein a width of the protrusion member is smaller than or equal to a width of the electrode of the driving IC, wherein the TFT substrate is formed by:

forming a photoresist organic layer in the pixel and pad regions; and

patterning the photoresist organic layer to simultaneously form an insulating layer in the pixel region and a protrusion member in the pad region, wherein the insulating layer protects the plurality of TFTs and the conductive lines, and the protrusion member is formed on the electrode pad.

14. (currently amended) The method of claim 13, wherein the TFT substrate is further formed by:

~~forming a photoresist organic layer in the pixel and pad regions;~~

~~patterning the photoresist organic layer to form an insulating layer in the pixel region and a protrusion member in the pad region, the insulating layer protecting the plurality of TFTs and the conductive lines, the protrusion member being formed on the electrode pad;~~

forming a conductive layer over the insulating layer and the protrusion member; and

patterning the conductive layer to simultaneously form a pixel electrode on the insulating layer and a conductive coating layer on the protrusion member electrically connected to the electrode pad.

15. (original) The method of claim 14, wherein the conductive layer comprises indium tin oxide (ITO) or indium zinc oxide (IZO).

16. (original) The method of claim 14, wherein the conductive layer comprises metal.

17. (previously presented) The method of claim 14, wherein the conductive layer comprises a stacked layer having first and second layers, the first layer including ITO or IZO and the second layer including metal.

18. (original) The method of claim 13, wherein the adhering member comprises a non-conductive resin that is softened during a thermal compression process on the driving IC and has gradually hardened from the time when the thermal compression process is completed, so that the driving IC is adhered to the conductive bump by a contraction of the non-conductive resin due to a hardening thereof.

19. (new) The thin film transistor substrate of claim 1, further comprising a pixel electrode formed on the insulating layer, wherein the pixel electrode comprises substantially the same material as the conductive coating layer.

20. (new) The thin film transistor substrate of claim 19, wherein the pixel electrode includes at least one of ITO, IZO, AlNd and MoW.

21. (new) The thin film transistor substrate of claim 20, wherein the pixel electrode comprises a first layer and a second layer formed on the first layer, wherein the first layer includes ITO or IZO and the second layer includes AlNd or MoW.

22. (new) The liquid crystal display apparatus of claim 7, further comprising a pixel

electrode formed on the insulating layer, wherein the pixel electrode comprises substantially the same material as the conductive coating layer.

23. (new) The liquid crystal display apparatus of claim 22, wherein the pixel electrode includes at least one of ITO, IZO, AlNd and MoW.

24. (new) The liquid crystal display apparatus of claim 22, wherein the pixel electrode comprises a first layer and a second layer formed on the first layer, wherein the first layer includes ITO or IZO and the second layer includes AlNd or MoW.